

Bearing steel.**Publication number:** EP0458646**Publication date:** 1991-11-27

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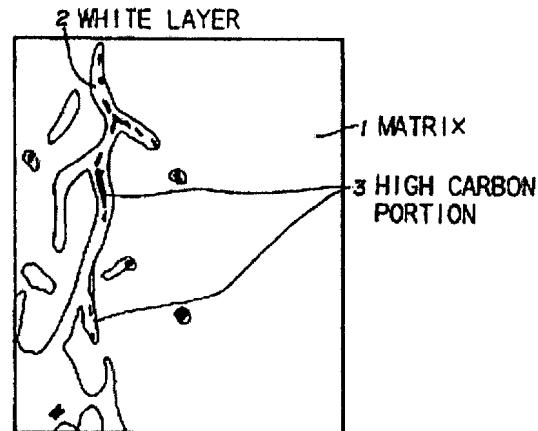
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Cited documents:

US3929523
 GB1408218
 SU120526
 SU226858
 GB2155951

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A bearing steel having long rolling life comprising, by weight, 0.65 to 0.90% of C, 0.15 to 0.50% of Si, 0.15 to 1.0% of Mn and 2.0 to 5.0% of Cr, and the balance of Fe. Austenite grain size can be prevented from becoming coarser to make hardening in high temperature possible by further adding 0.0090 to 0.0200% of N, one or more of 0.010 to 0.050% of Al, and 0.005 to 0.500% of Nb as optional elements to the steel. Further, rolling fatigue life can be improved by further adding one or more of 0.20 to 0.50% of Ni, 0.10 to 2.00% of Mo and 0.05 to 1.00% of V as optional elements, and machinability can be improved by further adding one or more of 0.02 to 0.05% of S, 0.005 to 0.10% of rare earth elements, 0.02 to 0.30% of Pb, 0.0005 to 0.0100% of Ca, 0.001 to 0.200% of Bi, 0.005 to 0.20% of Se and 0.005 to 0.100% of Te in the steel as optional elements.

FIG.2

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